DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-028112
Date Inspected: 06-Aug-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1930
Location: Job Site

CWI Name:	As noted below			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

12E-E2.1 (Interior)

This QA Inspector randomly observed ABF/JV qualified welder Xiao Jian Wan #9677 continuing to perform production welding using the Flux Core Arc Welding (FCAW) process in the 4G overhead position on the A deck joint at 12E-E2.1 on the interior of the OBG. The splice joint was preheated to greater than 200 degrees Fahrenheit using Miller Proheat 35 Induction Heating System with the heater blanket located at the opposite side of the deck prior/during welding. This QA Inspector observed QC Inspector Salvador Merino verify prior to the start of welding operations, that the minimum preheat temperature as per the approved WPS was established; and afterwords verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with ABF-WPS-D1.5-1-3110-4. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted the work at this location is in progress and appeared to be in general conformance with the contract specifications.

12E PP116-BW1 (Interior)

This QA Inspector randomly observed the fit up operations performed by QC Inspector Salvador Merino on the beam web at 12E PP116-BW1 on the interior of the OBG. The Complete Penetration Joint (CJP) complied with

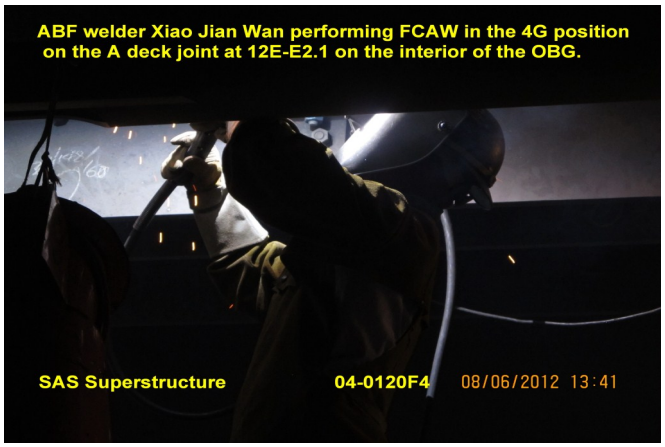
the specifications and ABF/JV qualified welder Guo Wu Chen #1556 was observed performing the Shielded Metal Arc Welding (SMAW) Process in the 3G vertical position while the QC Inspector monitored the welding and the parameters as they pertained to ABF-WPS-D1.5-1040A. The welder was observed grinding and blending the start/stop edges of the work utilizing a small disc grinder and compressed air in between passes as QC measured the inter-pass temperatures with an infra-red temperature gun. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted the work at this location is in progress and appeared to be in general conformance with the contract specifications.

12E PP117-BW1/SP1/SP2 (Interior)

This QA Inspector randomly observed the in progress welding on 12E PP117-BW1/SP1/SP2 on the interior of the OBG. ABF/JV qualified welder Jia Yan #1571 was observed performing the SMAW process in the 3G vertical position. Prior to welding QC Inspector Salvador Merino was observed monitoring the pre-heating of the joint and the parameters as they pertain to ABF-WPS-D1.5-1040A. This QA Inspector verified that the 3.2mm electrodes were stored in an electrically heated thermostatically controlled oven after removal from the sealed containers. The exposure limits of the electrodes appeared to comply with the minimum storage oven temperature of 120 degrees Celsius as per the contract documents. The welding parameters and surface temperatures were verified by the QC inspector's utilizing a Fluke 337 clamp meter to measure the electrical welding parameters. The welder was observed grinding and blending the start/stop edges of the work utilizing a small disc grinder and compressed air in between passes as QC measured the inter-pass temperatures with an infra-red temperature gun. Upon completion of welding on face A, the QC Inspector performed a Magnetic Particle (MT) Inspection of the back-gouged site and found no rejectable indications. Welding commenced on face B and progressed throughout the remainder of the shift. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the production welding at this location was in progress and appeared to be in general conformance with the contract documents.

Summary of Conversations:

No relevant discussions to report.



Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910 , who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer